What is claimed is:

1. A method for increasing nucleotide transfer and expression in recipient cells comprising:
introducing to said recipient cell a first replication incompetent viral vector, and a second replication incompetent viral vector, wherein one or both of said vectors comprise a nucleotide sequence the expression of which is desired in said recipient cell, and further wherein said first and second viral vectors are complementary in trans, so that upon cotransduction viral replication is enabled.

2. The method of claim 1 wherein said nucleotide sequence is an expression construct.

3. The method of claim 1 wherein said viral vector is selected from the group consisting of:
retrovirus, adenovirus, Herpes virus, adeno-associated virus, lentivirus, Epstein Barr virus, and Reovirus.

4. The method of claim 3 wherein said virus is an adenovirus.

5. The method of claim 4 wherein said first or second replication incompetent adenoviral vector is an E1 mutant.

6. The method of claim 4 wherein said first or second vector is an E4 mutant.

7. The method of claim 4 wherein said first or second vector is an E3 mutant.

8. The method of claim 7 wherein said first or second vector is recombinant 1014.

9. The method of claim 7 wherein said first or second vector is AVC2.TK

10. The method of claim 1 wherein said nucleotide sequence encodes green fluorescent protein.

11. The method of claim 1 wherein said sequence encodes a tumor suppressor gene.

12. The method of claim 1 wherein said sequence encodes a tumor suicide gene

13. A recipient cell transformed by the method of claim 1.

14. A composition for transforming a recipient cell comprising: first and second viral vectors wherein said vectors are replication incompetent cotranscomplements of each other.

15. The method of claim 14 wherein said viral vectors are replication incompetent adenoviral vectors.

16. The method of claim 15 wherein said first or second vector is an E4 mutant.

17. The method of claim 15 wherein said first or second vector is an E3 mutant.

18. The method of claim 15 wherein said first or second vector is recombinant 1014.

19. The method of claim 15 wherein said first or second vector is AVC2.TK.

20. A method for increasing gene transfer to recipient cells comprising:

introducing to said recipient cell a first replication incompetent adenoviral vector, and a second replication incompetent adenoviral vector, wherein one or both of said vectors comprise a nucleotide sequence the expression of which is desired in said recipient cell, wherein said first and second adenoviral vectors are transcomplementary, so that upon cotransduction viral replication is enabled.

21. The method of claim 20 wherein said nucleotide sequence is an expression construct.

22. The method of claim 20 wherein said first or second replication incompetent adenoviral vector is an E1 mutant.

23. The method of claim 20 wherein said first or second vector is an E4 mutant.

24. The method of claim 20 wherein said first or second vector is an E3 mutant.

25. The method of claim 24 wherein said first or second vector is recombinant 1014.

26. The method of claim 24 wherein said first or second vector is AVC2.TK

27. The method of claim 20 wherein said nucleotide sequence encodes green fluorescent protein.

28. The method of claim 20 wherein said sequence encodes a tumor suppressor gene.

29. The method of claim 20 wherein said sequence encodes a tumor suicide gene

30. A recipient cell transformed with the vectors of claim 20.

31. A composition for transforming a recipient cell comprising: first and second adenoviral vectors wherein said vectors are replication incompetent cotranscomplements of each other.

32. The method of claim 31 wherein said first or second replication incompetent adenoviral vector is an E1-/E3 deletion mutant.

33. The method of claim 31 wherein said first or second vector is an E4 mutant.

34. The method of claim 31 wherein said first or second vector is an E3 mutant.

35. The method of claim 31 wherein said first or second vector is recombinant 1014.

36. The method of claim 31 wherein said first or second vector is AVC2.TK

37. A method of inducing tumor cell regression comprising: introducing to said tumor cell a first replication incompetent adenoviral vector, said vector including a nucleotide sequence which encodes a suicide gene, the expression of which is desired in said recipient tumor cell, and a second replication incompetent adenoviral vector, said vector comprising a suicide gene the expression of which is desired in said recipient cell, wherein said first and second adenoviral vectors are transcomplementary.

38. The method of claim 37 wherein said suicide gene is a sodium iodide symporter gene.

39. The method of claim 37 wherein said suicide gene is a herpes simplex virus thymidine kinase gene.

40. The method of claim 39 further comprising the step of: introducing an agent to activate said suicide gene.

41. The method of claim 40 wherein said agent is radioactive iodide.

42. A method of inducing tumor cell regression comprising: introducing to said tumor cell a first replication incompetent adenoviral vector, said vector including a nucleotide sequence which encodes a thyroid sodium iodide symporter gene, the expression of which is desired in said recipient tumor cell, and a second replication incompetent adenoviral vector, said vector comprising a sodium iodide symporter gene the expression of which is desired in said recipient cell, wherein said first and second adenoviral vectors are transcomplementary, and thereafter exposing said tumor cells to radioactive iodide.